

**Texas Instruments Incorporated**

Post Office Box 655474, MS 3999  
Dallas, Texas 75265-5474  
7839 Churchill Way  
Dallas, Texas 75251-1900

(972) 917-5557

**FAX COVER SHEET**

Page 1 of 5

**DATE:**

|   |  |
|---|--|
| <b>FROM:</b><br><br>David Denker<br><br><b>COMPANY:</b><br><br>Texas Instruments Incorporated<br><br><b>PHONE NUMBER:</b> (972) 917-4388<br><br><b>FAX NUMBER:</b> (972) 917-4418 | <b>TO:</b><br><br>Examiner: B. Souw<br><br>U.S. Patent & Trademark Office<br><br>Group: 2814<br><br><b>PHONE NUMBER:</b> 703-305-1481 <b>3303</b><br><br><b>FAX NUMBER:</b> 703-308-7722 |
|   |  |

This telecopy is intended only for the use of the addressee named and contains legally privileged and/or confidential information. If you are not the intended recipient of this telecopy, you are hereby notified that any dissemination, distribution, copying or use of this communication is strictly prohibited. Applicable privileges are not waived by virtue of the document having been transmitted by Fax. Any misdirected faxes should be returned to the sender by mail at the address above.

|   |              |            |
|---|--------------|------------|
| Re:   | Appl.#:      | 09/116,138 |
|   | Atty Docket: | TI-24953   |
| <b>Response Under 37 C.F.R. § 1.116 - Expedited Procedure</b> |              |            |
| <b>Examining Group 2814</b>                                   |              |            |

**FAX COPY RECEIVED**  
**DEC 04 2000**  
TECHNOLOGY CENTER 2800

Response Under 37 C.F.R. § 1.116 - Expedited Procedure  
Examining Group 2814

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**In re the application of: Anthony *et al.*

Serial No.: 09/116,138

Filed: 07/15/98

For: High Permittivity Silicate Gate Dielectric

Docket:

TI-24953

Examiner:

B. Souw

Art Unit:

2814

**FAX COPY RECEIVED****DEC 04 2000****AMENDMENT PURSUANT TO 37 C.F.R. § 1.116**

TECHNOLOGY CENTER 2800

November 29, 2000

Ass't Commissioner for Patents  
Washington, DC 20231

|   |
|---|
| <p align="center"><b>FACSIMILE CERTIFICATE</b></p> <p>I hereby certify that this correspondence is being transmitted by Facsimile to the Patent and Trademark Office in accordance with 37 C.F.R. § 1.6d on</p> <p align="center"><u>December 4</u>, 2000.</p> <p align="center"><u>Tina Rendon</u></p> <p align="left">Tina Rendon</p> |
|---|

Examiner:

In response to the Office Action dated September 20, 2000, please consider the following remarks.

**REMARKS**

Claims 1 - 30 and 36 - 45 are still pending in this application and have been rejected by Examiner.

1. The Office Action rejected Claims 1, 12 - 23, 26 - 30, 37, 38 and 40 under 35 U.S.C. § 103 as being unpatentable over the Hori patent (Hori '766), in view of the Hsieh *et al.* patent (Hsieh '035). Applicants respectfully traverse examiner's interpretation of the prior art as rendering the invention obvious over this patent. The Office Action notes that Hori '766 teaches how to form a FET with a silicon oxynitride gate dielectric. The Office Action also notes that Hsieh '035 teach how to use metal silicates as high permittivity capacitor dielectrics that minimize leakage currents. The Office Action then alleges it would be obvious to combine Hori '766's method of forming improved-mobility FETs having an oxynitride film with Hsieh '035's capacitor dielectric—and that this combination would form applicants' invention.